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EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT PAPER NUMBER

1771

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,487

Applicant(s)

BURTON ET AL.

Examiner

Ula C Ruddock

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 24-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/24/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The Examiner has carefully considered Applicant's amendment and accompanying remarks filed December 8, 2003.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkins (US 6,094,883) in view of Daurer et al. (US 5,540,971). Atkins discloses a safety barrier for roof construction comprising first and second layers of vinyl and metallized polyester with a fiberglass scrim (col 2, ln 35-38). The barrier is preferably a thin film material having a plurality of layers with at least one of the layers being vapor impervious sufficient to provide a roof vapor barrier (col 2, ln 26-28). Atkins fails to disclose that the facing layer is applied with an adhesive coating as required in claim 1. Furthermore, Atkins fails to disclose that the scrim is a triaxial scrim comprising polyester fibers and that the scrim includes a selvage area that contains an additional number of threads.

Daurer et al. (US 5,540,971) disclose an industrial roofing fabric comprising a triaxially wound nonwoven roofing membrane fabric wherein the selvage areas of the fabric have an increased number of warp yarns (abstract). The roofing material consists of a triaxial scrim fabric made of polyester yarns (col 1, ln 48-52). Furthermore, the polyesters yarns of the scrim are coated with a thermoplastic coating to provide good adhesion and to enhance the strength of the roofing material against ripping, tearing, or delamination (col 1, ln 42-47). It should be noted that

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the Examiner is equating the thermoplastic coating on the polyester yarns of Daurer et al. to the adhesive claimed in the present invention. Therefore, it would have been obvious to one having ordinary skill in the art to use the polyester triaxial scrim of Daurer et al. as the scrim of the Atkins' barrier, motivated by the desire to create a roofing barrier with increased flexibility and strength. Furthermore, it would have been obvious to one having ordinary skill in the art to use the thermoplastic coating of Daurer et al. as an adhesive in the Atkins' barrier, motivated by the desire to create a roofing material having strength against ripping, tearing, or delamination. Finally, it would have been obvious to use the selvage areas as disclosed by Daurer et al. in the roofing barrier of Atkins, motivated by the desire to create a roofing material having increased strength and durability.

The combination of Atkins and Daurer et al. fail to disclose that the scrim has a weight of at least 2 oz/yd², between about 2-8 oz/yd², or 3.0-6.5 oz/yd², or 3-10 oz/yd², or 6-9 oz/yd² and the vapor barrier has an average thickness of less than about 0.03 inches, as required in claims 10-15. It should be noted that optimizing the scrim weight and the thickness of the vapor barrier are result effective variables. For example, the heavier the scrim and the thicker the barrier, the stronger the vapor barrier. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the scrim have a weight of at least 2 oz/yd², between about 2-8 oz/yd², or 3.0-6.5 oz/yd², or 3-10 oz/yd², or 6-9 oz/yd² and the vapor barrier have an average thickness of less than about 0.03 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized the

weight of the scrim and the thickness of the vapor barrier, motivated by the desire to create a roofing vapor barrier having increased strength and durability.

Furthermore, although the combination of Atkins and Daurer et al. do not explicitly teach that the vapor barrier does not substantially rupture when a bag of sand having a weight of approximately 400 pounds and a diameter of approximately 30 inches is dropped onto said vapor barrier from a distance of about 42 inches above an upper surface of said vapor barrier, it is reasonable to presume that this property is inherent to the combination of Atkins and Daurer et al. Support for said presumption is found in the use of like materials (i.e. a composite comprising a metallized film, a triaxial polyester scrim, and a vinyl film). The burden is upon Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In addition, the presently claimed property of the vapor barrier not substantially rupturing when a bag of sand having a weight of approximately 400 pounds and a diameter of approximately 30 inches is dropped onto said vapor barrier from a distance of about 42 inches above an upper surface of said vapor barrier would obviously have been present once the Atkins and Daurer et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

With regard to the newly added limitation of the scrim being thermally bonded to the first facing layer, it should be noted that the method of forming an article is not germane to the issue of patentability of the article itself. Therefore, this limitation has not been given patentable weight. Furthermore, in the final product, there would be no discernable difference in the composite between a thermally bonded scrim and one that is not thermally bonded.

Rejection is maintained.

Response to Arguments

4. Applicant's arguments filed December 8, 2003, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that the rupture property claimed in the present invention would not inherently be present in the product of Daurer et al. and Atkins. Applicant further argues that the scrim of the present invention is thermally bonded to the first facing layer, whereas the scrim of Daurer et al. and Atkins is not thermally bonded. This argument is not persuasive because, as set forth above, the method of forming an article is not germane to the issue of patentability of the article itself. Therefore, this limitation has not been given patentable weight. Furthermore, in the final product, there would be no discernable difference in the composite between a thermally bonded scrim and one that is not thermally bonded. Applicant also argues that a multitude of different features of the composite vapor barrier may be altered to influence its strength such as the size of the threads of the scrim and the spacing of the treads in the scrim. This argument is not commensurate in scope with the claims because the claims fail to specify these other properties in the present claims. Applicant also argues that one of ordinary skill in the art would not have incorporated the scrim of Daurer et al. in the barrier of Atkins. This argument is also not persuasive because both references are drawn to roofing materials and therefore, they are analogous. Furthermore, it is well known in the roofing industry to incorporate a scrim in a composite to provide additional reinforcement and improve the strength of the composite. In addition, the Examiner is simply replacing the fiberglass scrim of Atkins with the polyester scrim of Daurer et al.

With regard to Applicant's arguments regarding inherency, properties are a result of the structure, and as set forth above, both the barrier of Daurer et al. and Atkins and the barrier of the present invention comprise a metallized film, a triaxial polyester scrim, and a vinyl film. Therefore, it is reasonable to presume that the rupture property is inherent to the invention. Furthermore, with respect to situations where the Applicant claims properties which are not taught by the prior art, MPEP 2112.01 states when the structure recited in the references is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent. As previously set forth, Daurer et al. and Atkins teach all of the positively claimed structural limitations of the vapor barrier. Thus, the properties, which are a result of the vapor barrier structure, are properly presumed to be inherent to the barrier taught by Daurer et al. and Atkins. The Applicant has the burden of showing that they are not. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). However, Applicant's argument that the properties are not explicitly taught by the prior art is not sufficient to establish that the properties are not present in the prior art.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UCR *ucr*

Ula Ruddock

Ula C. Ruddock
Primary Examiner
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